Device Modeling Report

COMPONENTS: CAPACITOR/ CERAMIC
PART NUMBER: ECKATS101MB
MANUFACTURER: PANASONIC
REMARK: TA=80C

Bee Technologies Inc.

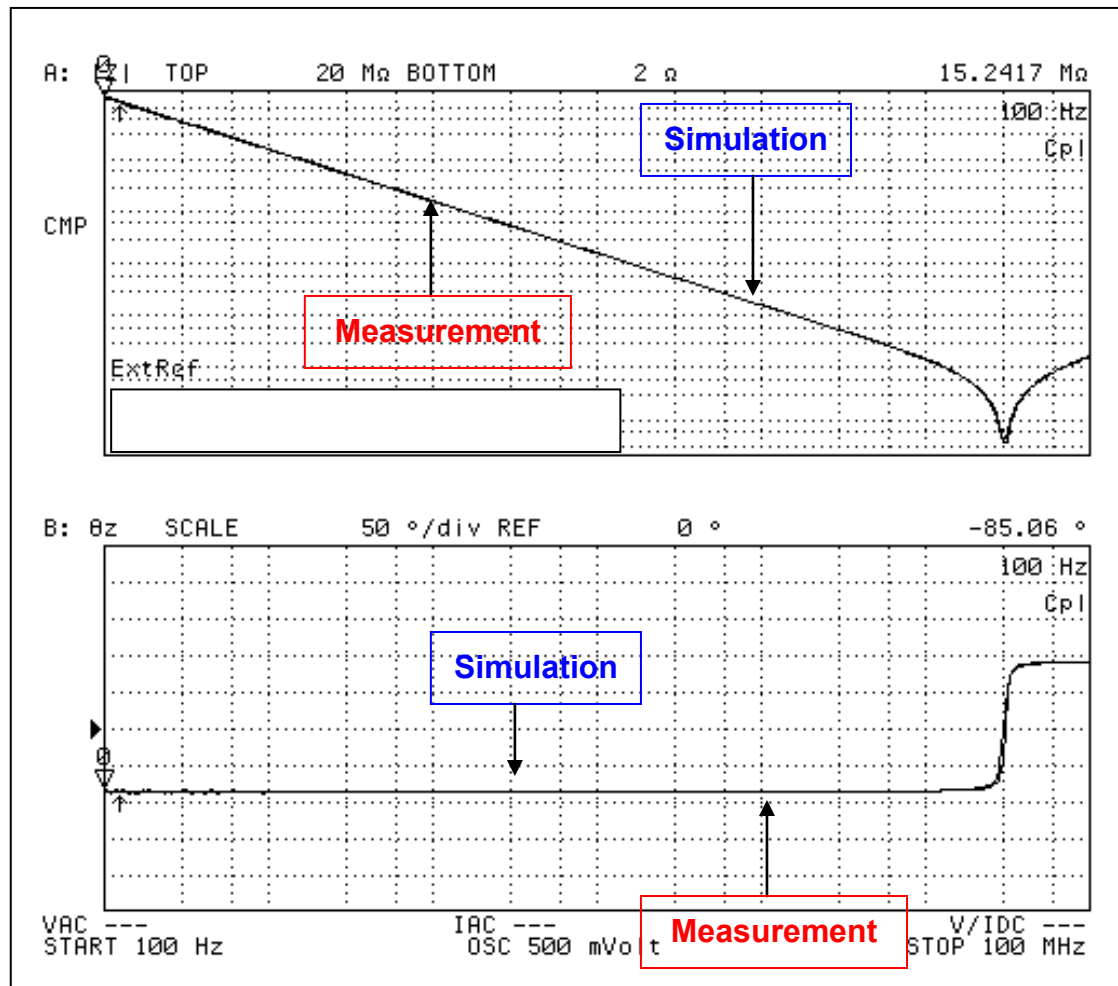# Theory: Auto Balancing Bridge Method

Optimization of Simulation

Range of adjustment Frequency:100 Hz to100M(Hz)

Frequency vs.|Z| and Frequency vs. θz Characteristic

Attention)
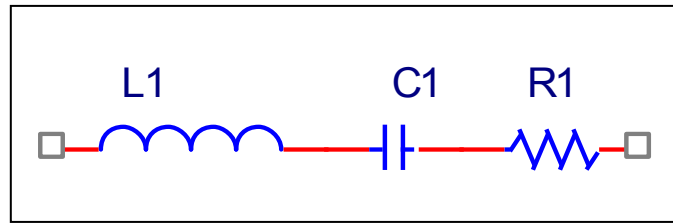
Please use SPICE MODEL within the range from 100Hz to 100M(Hz)

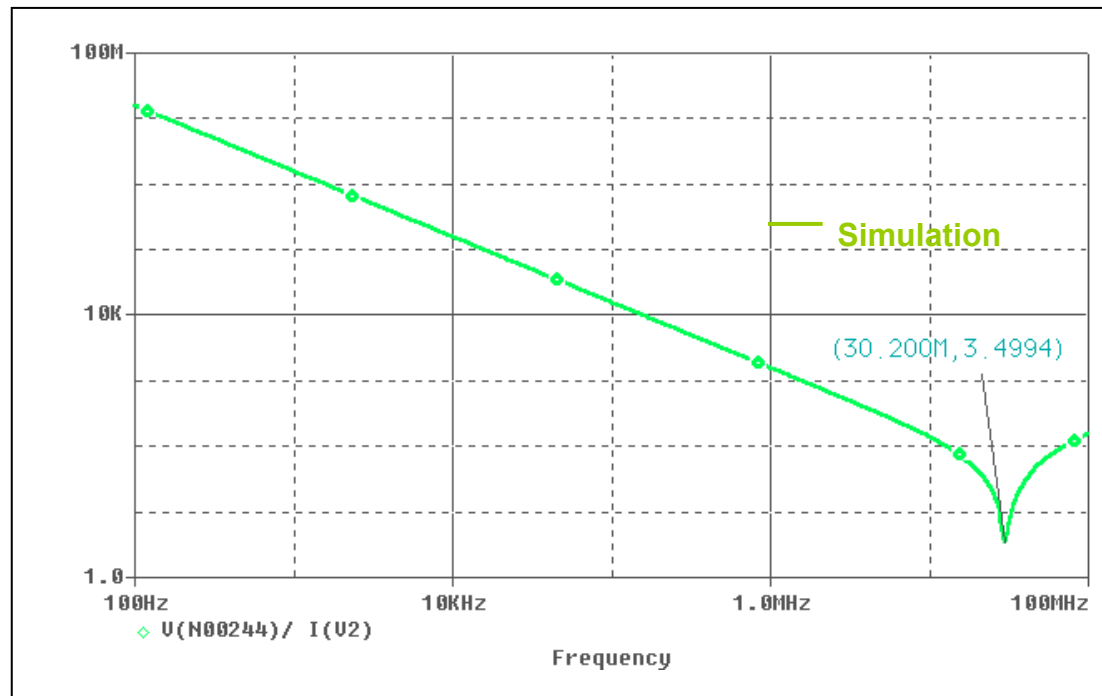| L1	
C1	
R1	

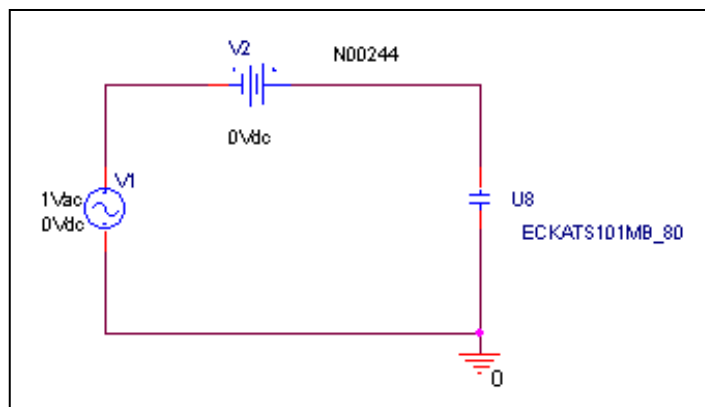Equivalent circuit

L1   C1   R1

Frequency vs. IZI Characteristic

Circuit Simulation result

Evaluation Circuit

Simulation result

Frequency (Hz)	IZI (ohm) :Measurement	IZI (ohm) :Simulation	% Error
100	14.7749M	15.762M	6.6809
1K	1.5552M	1.5573M	0.1350
10K	153.616K	157.62K	2.6065
100K	15.5889K	15.573K	0.1020
1M	1.58847K	1.5745K	0.8795
10M	146.18	138.355	5.3530
100M	147.633	156.337	5.8957

	Measurement	Simulation	%Error
FSRF(Hz)	31.622M	30.200M	4.4969
IZI (ohm)	3.48786	3.4994	0.3309